DOCUMENT RESUME

ED 088 781 SO 007 247

AUTHOR	Pyykkonen, Maija-Liisa
TITLE	[Pre-school Education.] Information Bulletin.
INSTITUTION	Finnish National Board of Education, Helsinki. Research and Development Bureau.
PUB DATE	Feb 73
NOTE	19p.; A few pages of this document will not reproduce clearly
EDRS PRICE	MF-$0.75 HC-$1.50
DESCRIPTORS	*Comparative Education; Day Care Services; *Early Childhood Education; *Educational Change; Educational Experiments; Educational Research; Equal Education; Experimental Programs; Experimental Schools; Instructional Program Divisions; Kindergarten; National Programs; *Preschool Education; Preschool Evaluation; Preschool Learning; Preschool Programs; Social Change; Sociocultural Patterns
IDENTIFIERS	*Finland

ABSTRACT

This Information Bulletin contains an introduction and three articles on preschool education. The introduction notes the unsolved problem of providing care outside the home for children below the school age of seven, day care and preschool education being the alternatives considered. The first article "Pre-school Education in Finland" recounts circumstances which led to the appointment in 1970 of the Committee for Pre-primary Education to define and plan preschool education and describes the results of that committee's efforts. The second article, "The Pre-school Experiment," describes a few early attempts at preschool education, made at the descretion of municipal school systems during the sixties, and preschool experimentation evolving from the mandate of the Committee for Pre-primary Education and utilizing the results of that earlier experimentation to define a year plan for curriculum to be developed under practical experiment conditions. The third article contains short summaries of research studies, combined with the experimentation programs to ascertain the effects of group size, duration of instruction, and supervision and control on the children's development. (JH)

INFORMATION BULLETIN

NATIONAL BOARD OF EDUCATION
Research and Development Bureau
Finland

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

ED 088781

SP 007 247

National Board of Education
Research and Development Bureau
Helsinginkatu 34
00530 Helsinki 53
Finland
Telephone 90-716122

2/73

Contents:

Leader, Veikko Lepistö
Head of the Research and
Development Bureau — 1

Pre-school education in Finland
Maija-Liisa Pyykkönen — 2

The pre-school experiment
Alli Ruuskanen — 6

Research studies concerning
pre-school — 9

For further information,
please, write to Mrs.
Maija-Liisa Pyykkönen

BEST COPY AVAILABLE

Veikko Lepistö Head of the Research and Development Bureau

Pre-school is a part of the solutions with which the care of children below school-age can be arranged outside homes. According to the Act on the Day-care of Children, which was passed in January 1973, all children below school age can be included in day-care before the year 1990.

Plans have been made in our country to arrange pre-schools for 6-year olds in order to improve and equalize the learning and other abilities necessary in school-work of the children entering compulsory education.
Compulsory education starts at the age of seven. In 1971 pre-school experiments were started in 11 municipalities with the purpose of developing the models for pre-school. The experiment is still being carried out.

However, the arranging of pre-school into separate classes, though attached to the municipal school system, may be left unrealized. In a plan recently prepared for the development of the country's whole school system it was proposed that the schooling of 6-year olds be attached to compulsory education, and thus reduce the age of starting it by one year. The question of preparing children aged 5 years and less for school will probably be solved at the same time as deciding upon the various solutions for the day-care of children.

The pre-school experiment being carried out will give, however, valuable clues for solving the problems concerning educating and teaching the 6-year olds in the compulsory school, and it will also help the solution of the whole day-care problem. The pre-school experiment will be continued and its character will be adapted to take into account the probable lowering of the minimum age for compulsory education due in the near future.

Maija-Liisa Pyykkönen

PRE-SCHOOL EDUCATION IN FINLAND

Background knowledge

The education of children under 7 years of age is at present a little better than in the 1960's. Various kinds of créches and day nurseries for children under school age have no relation to primary schools in Finland except some experimental preliminary pre-school classes since September 1971. These classes are organised under the school administration and have their classrooms in school buildings.

In 1970 there were 275 créches in Finland for about 8 000 children and 427 kindergartens for 27 538 children. 19 082 of the children in the kindergartens were half-day-children, and 8 456 of them full-day-children. This means that only about 15 % of all the six year old children in the whole country attend kindergartens although most of the kindergartens are situated in towns and densely populated areas in the southern part of Finland. The most difficult problem concerning pre-school education today is how to get enough places in créches, kindergartens, and in pupils' day homes for almost all the children from 0 to 14 years of age needing this kind of day-care. Another problem is how to improve the activities of various pre-school institutions in all parts of the country in order to secure better pedagogical services both for the children and for the entire families.

Reasons for the Development of Pre-School Education

In various countries the development of pre-school education is at present a matter of public interest. This situation has been created by pedagogical and social reasons and by reasons connected with educational and labour market policies. It is now evident that from the pedagogical point of view the pre-school institutions are often ineffective. For this reason,

attempts have been made to change their curricula to a more pedagogical direction so that kindergartens now have qualities common to pre-school education. From the point of view of social equality and justice it has been considered necessary to arrange pre-school education for all children under school age, and above all for those who cannot get enough developmental stimulation at home. From the point of view of educational policy it is necessary to develop the pre-school system for example for the reason that the talented children of poor homes, the so-called "ability reserves" of a nation, could receive adequate education. From the point of view of labour market policy, pre-school education is a part of the educational system developing qualified persons, who themselves are able to find their place in the production system.

The Committee for Pre-Primary Education

In June 1970 the Cabinet appointed a Committee to investigate the problems connected with pre-school education. The duty of the Committee for Pre-Primary Education was:

1. to define the objectives of pre-school education,
2. to draw up a general plan for the development of pre-school education taking into account the economic possibilities and the plans for statutory organization of children's day-care,
3. to draw urgently up a pre-school curriculum for experimental purposes,
4. to make necessary suggestions for pre-school regulations and the curriculum proper for the pre-school.

The report of the Committee for Pre-School Education and experimental curriculum for the pre-school were published on the 30th of May, 1972. The Committee in its report uses the term pre-primary education as a general definition by which is meant all systematic educational activities aimed at satisfying the needs of pre-school aged children. The committee also uses the term in a narrower sense to designate only part of pre-primary education, principally the six-year-old.

The general and social objectives of pre-primary education the committee defines as follows:

- pre-primary education should help to support the endeavours to raise the national educational level
- pre-primary education should help to further the lessening of the disparities of educational and social prestige
- pre-primary education should help to promote judicious and critical attitudes and ways of thinking among the children and make possible their social growth, and
- pre-primary education should help to implement and safeguard the equality of woman in society.

The committee regards the development of learning readiness and the remedy of retarded development as the general pedagogical aim of pre-primary education. Learning readiness the committee divides into socioemotional, cognitive and psychomotory skills and physical fitness.

The committee believes that the social and pedagogical aims of pre-primary education can best be attained by forming compulsory and gratuitous pre-primary schools for the age group of six-year-old. These schools should be subordinated to the national school authorities.

To the extent resources permit, this pre-primary school should be extended to include also younger age groups in the future. As yet the schooling of five-year-old and younger children cannot, however, always be arranged solely in accordance with one organization pattern. Especially in densely populated areas the pre-primary education of children in this age group can best be handled by community owned or subsidized nursery homes and créches. In sparsely populated areas these could be replaced by for instance:

- (an) ambulatory pre-primary school teacher(s)
- (an) ambulatory pre-primary school vehicle(s)
- pre-primary school part of the year
- pre-primary instruction in the children's homes
- pre-primary school radio and TV.

The committee proposes that

- compulsory pre-school should be implemented for all 6 year old children under the supervision of school administrators
- the implementation of pre-school plans should begin in 1975 and be completed in the whole country by 1980.
- the care and instruction of 5 years old and younger children should be supervised by the administration for social affairs as before, but the management and supervision of pedagogical activities should belong to the Ministry of Education.

The Present situation

During the school year 1972/73, the experiment is carried out in fourteen different centres. The following problems need an urgent solution:

- A solution must be found to how to implement the pre-school education; particularly whose is the administrative responsibility. Will the pre-school education be subjected to the administration for school affairs or to the administration for social affairs?
- Evaluation and development of the pre-school curriculum
- Definition of the contents and the objectives of teacher training

On the ground of the recommendations drawn up by the 1971 Educational Committee the discussions about the pre-school education have got new contents. It seems now evident that pre-schools will be incorporated with the general education system by decreasing the compulsory school enter age from 7 to 6. That's why the implementation of the pre-school reform will begin later than recommended by the Committee for Pre-school Education.

The training of pre-primary school teachers should be based on the matriculation examination and take at least three years to complete. The curriculum could be divided into four parts the same way as in the training of class teachers, i.e.

- general studies
- subject studies
- pedagogical studies
- teacher's training proper.

Alli Ruuskanen

THE PRE-SCHOOL EXPERIMENT

The so called pre-school education has become a matter of public interest since the Act on the Principles of the School System (1968) includes a provision according to which the municipal school system can - in addition to the compulsory comprehensive school- include a kindergarten or corresponding pre-primary classes. At present, a pre-primary class attached to the comprehensive school can be founded for experimental purposes only.

The first pre-school experiment for 6-year-old children began in Lahti in autumn in 1966 and the second in Jyväskylä in the beginning of 1968. Administratively, the pre-school classes have been kindergartens but their work has been supervised and the experiment has been conducted by the communal pre-school board set up by the municipal government. The board consists of representatives of the local school and social administrators and of the teachers of the pre-primary classes.

Among the objectives of the pre-school experiment in Lahti the following may be mentioned:

1. to find out the possibilities of lowering the age at which compulsory school attendance begins,
2. to find out the differences in school maturity and the possibilities of compensating for them,
3. to develop a pre-primary curriculum,
4. to develop teaching methods suitable for pre-primary classes
5. to find out the appropriate location for pre-primary classes
6. to find out the demand for pre-school education in different social groups and on different levels of intelligence.

The pre-primary curriculum differed from that of the six-year-old children attending kindergartens so that more attention was laid on excercises in developing skills in the use of language and mathematics. The teachers had been recruited from the kindergarten

teachers and further training had been given to them.

The results indicated that the pre-primary education of a whole age group can be arranged to diminish individual differences in skills required at school.

The objectives of the pre-school experiment in Jyväskylä were to find out

1. what factors will change in pupils when the pre-school curriculum is put into practice. The development of children's learning abilities will be observed and the development of their social and personality traits,
2. how children who have participated in pre-school education and children who have attended ordinary kindergartens will succeed in the primary school.

While participating in pre-school education children had shown significant progress among other things in the following areas: vocabulary, grasp of numerical concepts, grasp of figures, problem-solving, ability to distinguish between different qualities, ability to concentrate.

The idea of combining the pre-school education with the basic general education has emerged simultaneously with the growth of industrialization and the rapid structural change in society. In June in 1970 the Cabinet appointed a committee to investigate problems connected with the pre-school.

The pre-school experimentation under supervision of central administrators began in eleven municipalities in the autumn of 1971. Twenty teachers and four hundred children participated in the experimentation that was partly controlled by the social administrators and partly by the school administrators. The Committee for Pre-School Education drew up a preliminary experimental curriculum for the experiment centres.

The work of the pre-primary school should not, the committee believes, be divided into exact predetermined learning or work periods. Also the traditional grouping and subgrouping of subjects is unpractical as a basis for the courses and the various activities in pre-primary school. As a starting-point, however, a clearly defined year plan is needed, which plan is

divided into work periods of say a month's duration, but which is being constantly revised to meet the needs of the individual children or the group and current events. In this way sufficient consideration is given to the various spheres of educational aims and contents. The teacher should draw up, for his own use, daily programs that are followed in a purposeful and flexible way.

In pre-primary school it apparently will be more practical to combine work and activity methods as the definition thereby is broadened and better describes the sweeping character of its work. Work activities in pre-primary school can be divided into the following eight categories:

- everyday activities
- play and games
- structured games, programs
- joint learning (study) periods
- creative activities
- excursions
- parties
- work tasks.

The aim of the 1972/73 experiment is to develop the experimental curriculum by checking and correcting the objectives, contents and methods, and by giving special attention to the proportion between the objectives and the material. During the school year 1972/73, the experiment is carried out in fourteen different centres

Research is combined with the pre-school experimentation as an essential part of the total scheme. The aim of the research activities is to find out how the size of a group, the duration of instruction and the supervision and control influence children's development.

Research studies concerning pre-school

1. Kyllikki Röman: Survey of functional determinants in experimental pre-schools in 1971-72.

2. Kyllikki Röman: What pre-school children's parents think about pre-school education.

3. Kyöstiö-Saarinen-Lampi-Kyröläinen: A plan for an integrating instruction in the pre-school.

4. Eila Tiihonen: Pre-school material and its demand.

5. Matti Hytönen: Teaching elementary mathematical concepts in pre-school.

6. Nummenmaa-Syvänen-Kotakorpi-Lähdeniemi-Orell-Riekkinen-Ruuhilehto-Toivio-Tuohi: Pre-school children in urban traffic

7. Eeva Saraste: Research and experiment program carried out with pre-school children in sparsely populated areas.

8. Isto Ruoppila: The influence of pre-school education. (Will be published soon)

We will publish here short summaries of the above mentioned research studies.

RÖMAN, KYLLIKKI (1971)

Survey of functional determinants in experimental preschools in 1971-72. Institute for Educational Research, Report No 121, University of Jyväskylä, Finland.

On the initiative of the preschool committee and the National Board of Schools preschool experiments were started in 11 municipalities in autumn 1971. Experiments are carried out both by the Ministry of Social Affairs and the Ministry of Education. Preschool is going to expand in the near future. One of the aims of the preschool experiments is to obtain information about the functioning conditions available for the preschools at the present moment. Experiments in progress have provided information on the following aspects: 1) Administrative organization of experimental preschools, 2) Physical environment of preschools, 3) Teachers and other personnel involved in experiments, 4) Preschool pupils and arrangements concerning them. Since experimentation has taken place under the auspices of social and educational agencies, it has been possible to gather experiences from different conditions and organizations, and to get some clues as to what aspects should receive special attention in the planning of preschools.

RÖMAN, KYLLIKKI (1972)

What preschool children's parents think about preschool education. Institute for Educational Research, Report No 150 , University of Jyväskylä, Finland.

The study examined views and attitudes about preschool education of those parents whose children participated in an experiment arranged by the Preschool Committee.
The sample, composed of 395 families, included all parents. The survey was conducted by means of a questionnaire, which was returned by 99.24 % of all parents.

The question dealt with: the need of pre-school, its organizational relation to the school system, its aims and pedagogical contents, cooperation between home and school. It was generally hoped that pre-school were available to all children and that it would function as a seprate unit or in connection with the kindergarten rather than the comprehensive school. Central educational aims were the development of cooperation, problem solving ability and creativity, and the diagnos and remedial treatment of learning difficulties. The parents expected the pre-school activities to resemble more those of the kindergarten than of the school. The parents were willing to participate the cooperation between home and school.

KYÖSTIÖ-SAARINEN-LAMPI-KYRÖLÄINEN,
A plan for an integrating instruction in the preschool,
11/1972, Institute of Behavioral Sciences, University of Oulu.

The goal of the study has been a plan for an integrating instruction in the preschool.
In the report by the plan for an integrating instruction is meant the organizing of the learning experiences in such a way the information, skills and attitudes are learned in an integrated manner typical of children.
Experimenting with the plan has started in a preschool class at the Teacher Training College of Oulu in autumn 1972. In the class special attention is given to reading and writing, as well as to the development of mathematical skills and also to the teaching of these skills at individual and group levels.
At the beginning a comprehensive school teacher was teaching the class, but since autumn 1972 a kindergarten teacher. Along with the 6-year olds also 5-year olds have nowadays been taken as pupils. The amount of pupils is 20.
The flexible linking of pre school into the comprehensive school causes difficulties. The fact that there are no teachers educated for this purpose creates additional problems.

In the areas of planning and methods a close co-operation between the preschool and the two first grades of the comprehensive school is necessary. In the preschool the instruction is based on complete integration. The plan takes into consideration the child's needs, maturity level and individuality. Attention is paid to the appropriateness of the working area. The importance of the function of the teacher is emphasized as well as the interaction between preschool and home. The development of a child is observed from the biological, ethical, social, and aesthetical points of view. In each field some tasks and goals are presented. In addition some learning units composed of the learning situations in the main subject matters are presented in a general way and at the end suggestions are made for materials to be acquired.
A film has been made of a day in a pre-school class at the Teacher Training College of Oulu (40 min/Sony), copies of which can be ordered from the Institute of Behavioral Sciences. University of Oulu.

TIIHONEN, EILA (1972)
Preschool material and its demand. Institute for Educational Research. Report No 140, University of Jyväskylä.

The purpose of the study was to make a survey of all available preschool material in use in the experimental preschool classes and to judge the applicability of the said materials on the basis of teacher-ratings. Results: Preschool material consists of both play- and teaching equipment. Preschool classes functioning under the social system have considerably more materials than the classes supervised by the school system. Majority of the available materials is felt quite suitable for preschool use by the teachers, and only a few materials have been consired 'not suitable'. At the moment the greatest demand for material is found in traffic instruction materials, learning games requiring deduction, wall-pictures and cheap equipment for out-door play.

MATTI HYTÖNEN (1972)

Teaching elementary mathematical concepts in preschool.

Psychological basis for teaching and a proposal for syllabus.
Institute for Educational Research, University of Jyväskylä. 141.

S u m m a r y

The purpose of the study was to examine the teaching of basic mathematical concepts in preschool. Special attention was directed to the theoretical grounds of curriculum development. As the starting point of selecting objectives, methods and contents was taken Galperin´s doctrine about the gradual development of mental functions, and the studies of Galperin and Georgiev (1969) and Willdauer (1968), which have analyzied the possibilities of developing preschool children´s quantitative thinking. In setting up objectives attention was paid to the special features of preschool children´s thinking (direct link between thinking and usage and concrete situation, the rigidity and slowness of analysis and synthesis), which Willdauer has described. These differences due to age have not been regarded as unchanging but as resulting from earlier development, which has been affected by home instruction and other developmental conditions. Development is not any spontaneous process of maturation, but development depends on certain factors, among which education and teaching have a central role.

The social meaning and tasks of preschool have not been given much attention in the present study. The same is true of the practical problems of the implementation of preschool. The study concentrated on the analysis of the psychological conditions of preschool education.

A programme for the teaching of set operations, measurement, and the concept of number was developed on the basis of the studies of Galperin and Georgiev and Willdauer. The programme also deals with the general principles of teaching mathematical concepts. These principles are derived from the peculiarities of the preschool child´s mental functions, and from the general regularities of the

development of mental functions and thinking. The principles have been presented by Willdauer. The programme is also based Galperin and Georgiev's view that the teaching of elementary mathematical concepts can to based on the measurement operation. A measuring unit gives the child an objective criterion for controlling his immediate observations and thus a possibility of becoming free from the dominating effect of immediate observation on thinking.

The presented teaching programme is not a finished product. The order and scheduling of teaching is not adequately planned. Neither has the programme taken into consideration the coordination of the teaching of mathematical concepts with other content areas (mother tongue, social studies, nature, music, movement education, and arts). Such coordination would presuppose a more detailed examination of all content areas and of the general goals of preschool. It is hoped that the presented teaching programme would be of use in the experiments concerning the preschool curriculum.

NUMMENMAA-SYVÄNEN-KOTAKORPI-LÄHDENIEMI-ORELL-RIEKKINEN-RUUHILEHTO-TOIVIO-TUOHI (1972)

Pre-school children in urban traffic, Institute of Psychology, University of Tampere. 66.

I part

The objective was to draft a program for giving traffic education to 5- and 6-year old children applicable to pre-school teaching. This drafting was based on information received from three subsurveys.

The tasks of the subsurveys were as follows:

a) to give a general view of the pre-schoolers' behavior in traffic and the activities involving moving outdoors.
b) to study the pre-schoolers' skills in traffic.
c) to find out how parents participate in giving traffic education.
d) to give an account of the children's views about traffic in general.

The frame of the teaching program consisted of an educational film with which the children were taught the essential skills necessary for a pedestrian. In addition a series of slides was presented. The children's knowledge were tested with the purpose to compare the effects of the different ways of presentation.

II part

Firstly, the aim of this part was to survey the children's daily interests and activities and to find the most common reasons that cause a child to move about and play.
Secondly, the children's abilities to manage in urban traffic were clarified along with their knowledge and views about the traffic. Thirdly, a general view was given about the giving of traffic education by the parents and how the parents think their children behave in traffic.

The research material was collected in the city of Tampere in spring 1972. 158 pre-school children were as subjects, and they were either interviewed or their behavior in traffic was registered by a video-tape recorder. In addition the parents of 90 pre-schoolers were interviewed.

The research established that the children's moving area usually consisted of their own yard or the close neighbourhood. In addition to the child's natural need to move the most important factors effecting the child's moving about were the play areas, peers and special interests. The activity of the parents had a decisive effect on the expansion of the children's living space. Almost one fourth of the children had special interests.

In investigating the children's skills to move about it was found out that their behavior in traffic had no consistency. 47 per cent of the subjects stopped before crossing the street and up to 91 per cent of the children used the crosswalk. The girls turned out to use crosswalks more frequently and to cross the streets more carefully than the boys. When alone or with a peer a child stopped and looked more frequently before crossing than when with an adult. The boys run and played more on the pavements than the girls. Also it was established that there was a cumulation in the amount of correct reactions in traffic.

In surveying the children's knowledge and views about the traffic, it turned out that over 25 per cent had the idea that one could not be hit by a car on a crosswalk. Almost half of the children considered the traffic sign "children" to be for pedestrians. Only 8 out of 40 children thought they would manage alone in the traffic and about 20 children were not sure.

From the interview with the parents it became apparent that most mothers had taughttheir children to stop and look before crossing, to walk on the pavement, to use the crosswalk, the meaning of the trafficlights, and that one is not allowed to play on the roads. Comparatively few parents had taught to cross the street in a group in areas with heavy traffic and to look behind before crossing the street. The parents experienced the factors associated with the street crossing difficult but important to teach. The teaching of girls and boys is quite similar, and the mothers estimated the girls to move about in traffic somewhat better than the boys.

III part

The purpose of the teaching experiment was to study the applicability of a film in giving traffic education to children and to measure its effectiveness.

The results of the testing of the children's knowledge show that all the experimental film-groups differ from the control group. It can be concluded that the experimental groups' knowledge about traffic have increased due to the teaching.

The results of the test were examined also in the slidegroup. With this group the aim was to study the effect of slides, comparable to a film, in general, and in comparison to that of the film in particular.

Compared to the film-group the slide-group succeeded equally well. The results with the slides prove that this cheaper and more flexible method can produce as good teaching results as teaching with a film.

SARASTE, EEVA (1972)

A research and experimentation program carried out with the pre-school children in sparsely populated regions. University of Joensuu, Research Institute of Karjala.

The purpose of the project is, through planning and experimenting, to gain results with which the realization of pre-school can be facilitated especially in the regions where services for pre-schoolers are needed due to the lack of stimulation in the area and its cultural unequality.

The material was collected by interview including 33 families. The selection criterion was that 80 per cent of the families lived in sparsely populated areas and the rest near by densely populated areas. The sample was random. The purpose of the interview was to gain knowledge of the expectations of the parents, their attitudes towards the pre-school and what forms of pre-school would serve them best. A pre-school held in the premises of the nearest elementary school was supported by the majority. Some were quite enthusiastic about the advantages of a mobile pre-school. Also the attitudes towards teaching at home were surprisingly positive. Correspondence teaching received both approval and criticism. A camp received only little support.

When surveying the parents' opinions about the curriculum of the pre-school it becomes obvious that the pre-school has primarily been seen as a play-school where the child's activity needs and play come first. The necessity of intellectual instruction is placed second.

A respective pre-school plan for the rural communes of Ilomantsi, Juuka, Pyhäselkä and Kiihtelysvaara has been drafted. The intention is to use various experimental models. The planning has been based on the experimentation plans of the pre-school committee in which a 3 x 3 design is used. As variables it included nature, social tradition, and modern environment, the effects of which on the affective, cognitive and psychomotor areas are studied.